AMENDMENTS TO THE CLAIMS

1-29. (Canceled)

30. (New) A method of removing accumulated solids from membranes situated in a vessel, the method comprising the steps of:

backwashing the membranes so as to dislodge accumulated solids from the surfaces of the membranes;

intermittently supplying a pressurized gas during filtration to form gas bubbles, whereby the gas bubbles scour the surfaces of the membranes; and

removing dislodged accumulated solids from the vessel.

31. (New) A method of removing accumulated solids from membranes situated in a vessel, the method comprising the steps of:

applying a transmembrane pressure to the membranes, whereby a filtrate passes through pores in the membranes;

backwashing the membranes so as to dislodge accumulated solids from the surfaces of the membranes while intermittently supplying a pressurized gas to form gas bubbles, whereby the gas bubbles scour the surfaces of the membranes; and

removing dislodged accumulated solids from the vessel.

32. (New) The method of claim 31, wherein the step of backwashing comprises backwashing with a gas.

33. (New) The method of claim 31, wherein the step of backwashing comprises backwashing with a liquid.

34. (New) The method of claim 31, wherein the step of applying a transmembrane pressure to the membranes, whereby a filtrate passes through pores in the membranes, further comprises intermittently providing gas bubbles from a source of pressurized gas to the membranes during filtration, whereby the gas bubbles scour surfaces of the membranes.

35. (New) A method of removing accumulated solids from membranes, wherein the membranes are situated in a vessel, the method comprising:

applying, in the absence of gas bubbles, a transmembrane pressure to the membranes, whereby a filtrate passes through pores in the membranes;

backwashing the membranes so as to dislodge accumulated solids from the surfaces of the membranes, while simultaneously providing gas bubbles from a source of pressurized gas to the membranes, wherein the gas bubbles scour the surfaces of the membranes; and thereafter

removing dislodged accumulated solids from the vessel.

36. (New) The method of Claim 35, the membranes form an array connected to a source of pressurized gas, wherein a plurality of gas distribution holes are distributed throughout the array, and wherein the array is configured to provide gas bubbles intermittently in a uniform distribution relative to the array such that the gas bubbles move past the surfaces of and vibrate the membranes to dislodge fouling materials therefrom.

37. (New) The method of Claim 36, wherein the membranes are arranged in close proximity to one another and are mounted to prevent excessive movement therebetween.

38. (New) The method of Claim 36, wherein, during the step of removing dislodged accumulated solids from the vessel, the accumulated solids are carried out of the vessel in an overflow therefrom at a top of the vessel.

39. (New) The method of claim 36, wherein the membranes are mounted in a header, and wherein the gas distribution holes are not solely peripheral to the distribution of the membranes in the header.

40. (New) The method of claim 39, wherein the gas bubbles pass substantially uniformly between each membrane in the array to scour the surface of the membranes and to remove accumulated solids.

41. (New) A method for filtering a feed liquid to obtain a filtrate, the method comprising:

providing a membrane module, the membrane module comprising a plurality of porous membranes, the membranes comprising a plurality of pores and an outer surface, wherein the membranes are mounted in a header, wherein the membranes form an array, wherein the membrane module is contained within a vessel, and wherein the module is positioned in the vessel;

providing a feed liquid to the vessel, the feed liquid comprising a fouling material; and

intermittently introducing gas bubbles under pressure into the membrane module while applying a transmembrane pressure to the membranes in the module, whereby a filtrate passes through pores in the membranes, thereby producing, in the vessel, a concentrated feed comprising accumulated solids.

42. (New) The method of claim 41, further comprising removing the accumulated solids from the vessel, wherein the accumulated solids are carried out of the vessel in an overflow therefrom at a top of the vessel.

43. (New) A membrane module comprising a plurality of porous membranes, the membranes forming an array, the module having a first header in which one end of each of the membranes is mounted, the first header connected to a source of pressurized gas so as to permit intermittent formation of gas bubbles such that, in use, the bubbles move past the surfaces of the membranes to dislodge fouling materials therefrom.

44. (New) The membrane module of claim 43, wherein the membranes comprise hollow membrane fibers, each of the fibers having an upper and a lower end, the fibers extending longitudinally between and mounted at the upper end to a second header and at the lower end to the first header, wherein the fibers are sealed at the lower end and open at the upper end to allow removal of filtrate, the fibers being arranged in close proximity to one another and mounted in a bundle in a substantially taut manner between the first header and the second header to prevent excessive movement therebetween, the fibers being substantially uniformly mounted in the first header relative to a distributed array of aeration holes in the first header, wherein the aeration holes are sized and located such that bubbles, formed by a pressurized gas connected to the first header and intermittently passing therethrough when the module is immersed in a liquid, pass substantially uniformly between the fibers, the fibers being mounted relative to one another so as to produce a rubbing effect between the fibers when vibrated by the gas bubbles.

45. (New) The membrane module of claim 44, wherein the distributed array of the aeration holes is not solely peripheral to the distribution of the membranes in the first header.